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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-----------------------|---------------------|------------------|
| 09/501,944 | 02/10/2000 | Srinivasan Venkatesan | OBC-98 | 4578 |
| 24963 | 7590 | 06/10/2004 | EXAMINER | |
| ENERGY CONVERSION DEVICES, INC. 2956 WATERVIEW DRIVE ROCHESTER HILLS, MI 48309 | | | MERCADO, JULIAN A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1745 | |

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

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|------------------------------|-------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 09/501,944 | Applicant(s) VENKATESAN ET AL. | |
| | Examiner Julian Mercado | Art Unit 1745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-7, 10-13, 15, 17 and 18 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☐ Claim(s) 1, 4, 6, 7, 10, 12, 13, 15, 17 is/are rejected.
 7) ☐ Claim(s) 5, 11 and 18 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 9, 2004 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 6, 7, 10, 12, 13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikoma et al. in view of Bougauchi et al.

The examiner maintains the present ground(s) of rejection for the reasons of record. The following is the examiner's response to applicant's salient arguments submitted in the December 1, 2003 amendment. This response is reiterated in full of the February 2, 2004 Office communication, as applicant's request for continued examination is notably absent of any additional arguments or amendment to the claims.

Applicant submits that “Ikoma provides no teaching or suggestion of a pectin binder” and that “Bougauchi uses a pectin binder in a zinc electrode but provides no teaching or suggestion that the pectin binder may be used in combination with a nickel hydroxide material”. (response page 6, emphasis as submitted) These arguments are not persuasive as they merely address the salient teachings of Ikoma et al. and Bougauchi et al. and not the combination as a whole, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The combination of Ikoma et al. and Bougauchi et al. is maintained to teach or at least suggest the claimed invention insofar as Ikoma et al. teaching a positive electrode employing a nickel hydroxide active material and Bougauchi et al. teaching pectin as a binder for an electrode.

Applicant submits that since the zinc electrode in Bougauchi et al. is typically used as a negative electrode, combining Bougauchi et al.’s pectin in Ikoma et al.’s positive electrode is improper. In reply, the examiner asserts the following which forms the basis for a proper combination: Ikoma et al. specifically teaches the addition of zinc to the positive electrode as a paste material, see col. 4 line 52-56:

A positive electrode was produced in the following manner. A spherical nickel hydroxide powder, cobalt powder, cobalt hydroxide powder and zinc oxide powder were mixed at a weight ratio of 100:7.5:2 and water was added to the mixture to obtain a paste. This paste

As discussed previously, Bougauchi et al. specifically teaches pectin as a binder, “[p]ectin is used to the binder consisting of Zn oxide powder and Zn powder or a simple substance of Zn powder, and thereby a paste with good fluidity is obtained.” (Abstract under ‘CONSTITUTION’) In other words, Bougauchi et al. teaches an improved paste fluidity from

the addition of pectin to an electrode binder. Thus, it is maintained that the skilled artisan would be motivated to modify the teachings of Ikoma et al. in view of Bougauchi et al. for reasons such as improving the fluidity of the *zinc paste* employed by Ikoma et al. by employing a *pectin/zinc paste* of Bougauchi et al. (emphasis added to highlight that both patentees teach a zinc paste material) The motivation for such a combination would be to enhance the mechanical strength of the formed electrode. (as taught by Bougauchi et al., Abstract) While the examiner concedes that Bougauchi et al.'s stand-alone disclosure may be drawn to addition of the pectin/zinc paste to the negative electrode, in the combined teachings of Ikoma et al. in view of Bougauchi et al. there is a reasonable expectation of success that the pectin/zinc paste would result in improved fluidity, etc. in the positive electrode of Ikoma et al., especially in view of both Ikoma et al. and Bougauchi et al. teaching the addition of a zinc paste to the positive electrode.

Allowable Subject Matter

As discussed in a prior Office action, claims 5, 11 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As stated in the October 7, 2002 Office action, the following is a statement of reasons for the indication of allowable subject matter: the prior art of record and to the examiner's knowledge do not teach or render obvious at least to the skilled artisan the instant invention regarding an alkaline electrochemical cell employing a nickel hydroxide active material and a binder comprising molasses.

Conclusion

All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

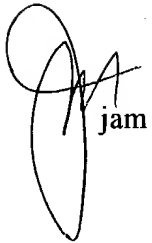
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 1745

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



Patrick Ryan
Supervisory Patent Examiner
Technology Center